

CLAIMS

What is claimed is:

1. A buffer circuit for use in a microphone assembly comprising:
an input for receiving a signal;
an input buffer coupled to the input;
an output;
a filter network coupled between the input buffer and the output;
a selector comprising:
 a first input;
 a first output responsive to the first input; and
 a tuning circuit coupled to the filter network for adjusting a characteristic of
the filter network, the tuning circuit responsive to the selector, wherein the
characteristic of the filter network is adjusted using the first input.
2. The buffer circuit of claim 1 wherein the first input is on a separable tab.
3. The buffer circuit of claim 1 wherein the first input is on a separable tab and
the separable tab is removed from the buffer circuit after the characteristic of the filter
network is adjusted.
4. The buffer circuit of claim 1 wherein the circuit comprises a resistor network.
5. The buffer circuit of claim 1 wherein the circuit is a ladder network, the ladder
network adjustable by activating a semiconductor device between an element of the ladder
network and a ground connection.
6. The buffer circuit of claim 5 wherein the ladder network comprises one of
resistors and capacitors.
7. The buffer circuit of claim 6 wherein a resistor of the ladder network has a
value of 5.5K ohms.

8. The buffer circuit of claim 5 wherein the semiconductor device is a field effect transistor (FET).

9. The buffer circuit of claim 1 wherein the first input is coupled to a biasing element.

10. The buffer circuit of claim 9 wherein the biasing element maintains a persistent state responsive to a programming signal applied to the first input.

11. The buffer circuit of claim 9 wherein the biasing element is a zener-zap diode.

12. The buffer circuit of claim 9 wherein the biasing element is an EEPROM.

13. The buffer circuit of claim 1 further comprising a resistive element coupled between the filter network and the circuit.

14. The buffer circuit of claim 13 wherein a value of the resistive element is 500K ohms.

15. A hybrid circuit for buffering an audio signal comprising:
a substrate having a first and second portion, the second portion severable from the first portion; and

a buffer circuit substantially disposed on the first portion of the substrate, the buffer circuit comprising:

- a first input for coupling the audio signal;
- a filter network coupled to the first input;
- an output coupled to the filter network;
- a tuner for adjusting the filter network; and

a controller for altering a value of the tuner, the controller having a second input, the second input disposed on the second portion of the substrate,
whereby a tuning signal coupled to the second input is used to adjust the tuner,
thereby changing a transfer function of the buffer circuit.

16. The hybrid circuit of claim 15 wherein the controller retains a setting upon receiving the tuning signal.

17. The hybrid circuit of claim 15 wherein the second portion of the substrate is permanently removed after the controller receives the tuning signal.

18. The hybrid circuit of claim 15 wherein the tuner is a ladder network, the ladder network adjustable by activating a semiconductor device between an element of the ladder network and a ground connection.

19. The hybrid circuit of claim 15 wherein the second input is further coupled to a biasing element, the biasing element maintaining a state after receiving the tuning signal.

20. A method for adjusting a buffer circuit for use in a microphone assembly comprising:

providing a desired response characteristic for the buffer circuit;
measuring an initial response characteristic of the buffer circuit;
comparing the desired response characteristic to the initial response characteristic;
determining an adjustment using the comparison, the adjustment for reducing a difference between the desired and initial response characteristics;
transmitting a signal to a selector circuit in the buffer circuit; and
tuning an adjustable filter coupled to the selector circuit, the adjustable filter for modifying the initial response characteristic.

21. The method of claim 20 further comprising:

assembling the buffer circuit in an acoustically sealed housing, a portion of the buffer circuit accessible from outside the housing.

22. The method of claim 20 further comprising:

removing a portion of the buffer circuit used in transmitting the signal to the selector circuit.

23. The method of claim 20 wherein the tuning the adjustable filter further comprises activating a semiconductor device between an element of a ladder network and a ground connection.

24. The method of claim 20 wherein the tuning the adjustable filter further comprises biasing the selector circuit with a zener-zap diode.